

DETAILED ACTION

1. This is a Non-Final Office Action in response to communications filed 7/25/2008. Claims 1-8 were amended. Claims 1-8 are pending and addressed below.

Response to Amendment

2. The substitute specification received 7/25/2008 is accepted and has been entered.
3. The amendments made to the specification are sufficient to overcome the objections raised in the previous office action.
4. The amendments to the claims are sufficient to overcome the rejections under 35 USC 112, second paragraph raised in the previous office action.
5. The indication of allowable subject matter in the previous application is removed in light of newly discovered prior art.

Claim Objections

6. Claim 2 is objected to because of the following informalities:

In the fifth line of claim 2, examiner believes the phrase “or a width or the vertical supports” should be changed to “or a width of the vertical supports”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by JP62-244935, hereafter referred to as '935.

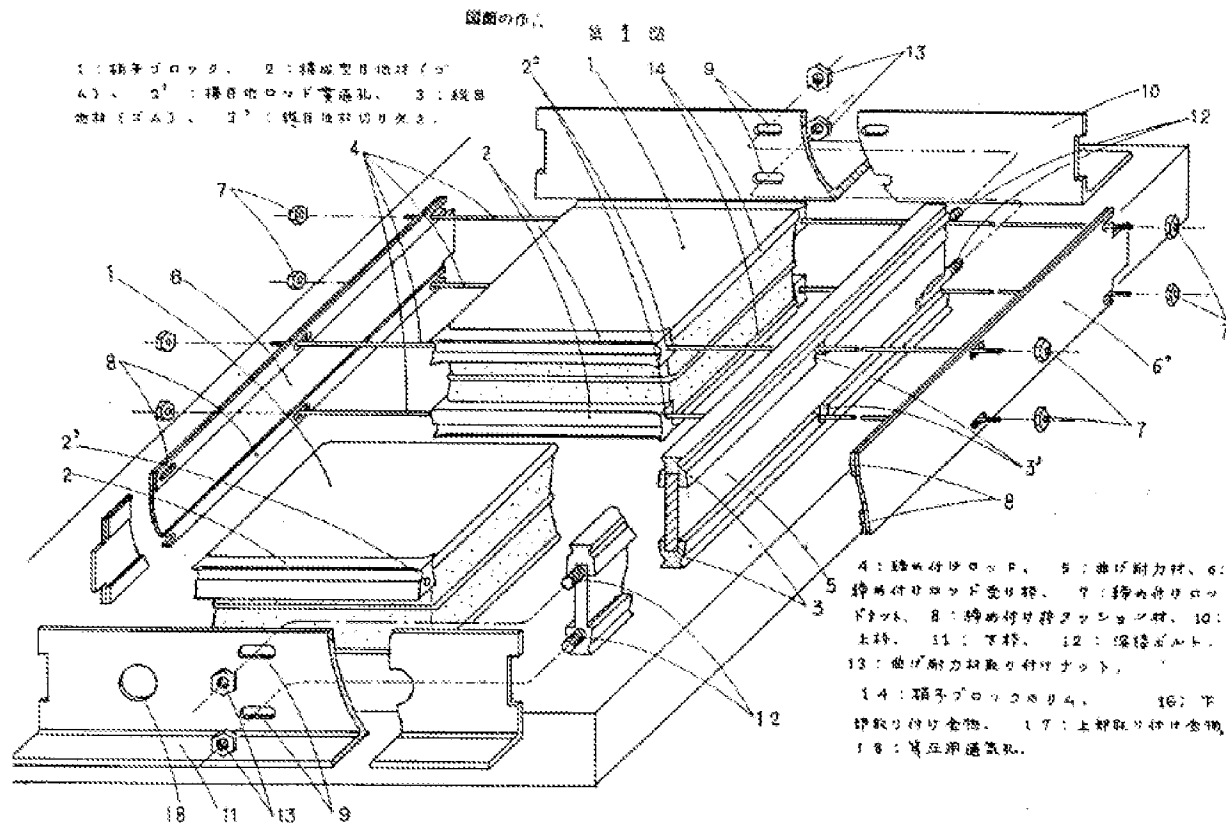


Fig. 1 from '935

Regarding claim 1, '935 discloses a "plurality of glass hollow tiles (Fig. 1, element 1),

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a plurality of supporting elements embracing the hollow tiles in a form of joined blocks comprising:

a plurality of horizontal supports (2), each horizontal support having at least one horizontal support recess with a horizontal support mortise (where rods 4 pass through horizontal supports 2) along a length of the horizontal support; and

a plurality of vertical supports (5), each vertical support having at least one vertical support recess with a vertical support mortise (where rods 12 pass into vertical supports 5) and at least one vertical support hole extending from a front to a back of the vertical support (3');

wherein in a form of joined blocks, horizontal support recesses align with vertical support holes such that a plurality of threaded fasteners (threaded to engage with nuts 7) in the horizontal support recesses (rods 4), and the vertical support recesses (rods 12), and the vertical support holes (rods 4 passing through holes 3') hold the supports together to form the construction unit."

Regarding claim 4, '935 discloses that the "threaded fasteners comprise a plurality of stud bolts and a plurality of longitudinal nuts co-operating with the stud bolts." The fasteners 4 and 12 are bolt-like rods which are threaded to couple to nuts 7 and 13.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-244935.

Regarding claim 5, '935 discloses that the horizontal support has a "length equal to a length of the glass hollow tile" as horizontal supports 2 can be seen to be equal in length to the tiles 1 at Fig. 1. '935 lacks that the vertical support hole is situated "at a distance from an end of the vertical support equal to a sum of the half height of the hollow tile and a half thickness of the horizontal support." Locating the vertical support hole (3') at a distance from an end of the vertical support by the half height of a tile plus the half thickness of a horizontal support entails decreasing the length of the vertical support. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of '935 by decreasing the length of the vertical support 5 such that the vertical support hole 3' is situated at a distance from the end of the support of a half tile height plus a half horizontal support height because where the general conditions of a claim are disclosed in the art, a change in size of a part involves only routine skill in the art.

11. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-244935 in view of Thompson (US Patent 5,655,345).

Regarding claims 2 and 3, '935 discloses the apparatus of claim 1, but lacks "a plurality of profiled slats, each having a slat width greater than a width of the horizontal supports or a width of the vertical supports, each slat inserting into a groove running along a length of the horizontal support or a length of the vertical support" and that those slats are "fixed to the horizontal support or the vertical support by a tongue-and-groove joint. Thompson teaches a glass block wall construction having profiled slats (Fig. 7, element, 40) with a width greater than a width of supports (see flanges 42 relative to width of support 23) which are connected to supports 23 via a tongue (44) and groove (24) joint. The use of slats with widths exceeding the widths of the supports they are connected to and a tongue-and-groove joint for connecting the slats to the supports allows the construction to be made water-resistant without the use of caulk or mortar. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of '935 by using profiled slats similar to that of Thompson connected via tongue and groove joints at the horizontal and vertical supports (2 and 5) in order to make the construction water resistant without the use of caulk or mortar.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-244935 in view of Wirkus (US Patent 5,740,646).

Regarding claim 6, '935 discloses the apparatus as described with claim 1, but lacks distance pads for forming an arched profiled wall. Wirkus teaches the use of distance pads (Fig. 1, element 42) to form an arched profiled wall of glass blocks. The use of a distance pads fills wedged spaces created with the formation of arched walls. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of '935 with distance pads mounted between the side surfaces of vertical supports 5 and the frontal surfaces of horizontal supports 2 in order to fill the wedged space created between adjacent blocks with the formation of arched walls.

13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-224935 in view of Coleman (US Patent 5,806,263).

Regarding claim 7, '935 discloses the apparatus as described with claim 1, but lacks that the "horizontal support recesses are grooved recesses made along the length of the horizontal supports and the vertical support recesses are vertical grooved recesses made along the length of the vertical supports."

Coleman teaches grooved recesses in glass block wall supports (Fig. 4, elements 20) which span the length of the support (10).

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The use of grooved recesses makes insertion of the fasteners easier by allowing them to be snapped into place rather than snaked through a hole.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of '935 by using grooved recesses similar to that of Coleman in the horizontal and vertical supports 2/5 in order to make insertion of the fasteners easier.

Regarding claim 8, '935 in view of Coleman discloses the apparatus as described with claim 7, but lacks that the grooved recesses have arch shaped bottoms. Making the bottom of the groove arched prevents lateral movement of a curved fastener in the groove. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of '935 in view of Coleman by making the bottom of the grooves 20 of Coleman, specifically element 26, arch shaped since such a change in shape would have been routine engineering to one of ordinary skill.

Response to Arguments

14. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN FRANKS whose telephone number is (571)270-3743. The examiner can normally be reached on Mon-Fri 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. F./
Examiner, Art Unit 3633

/Robert J Canfield/
Supervisory Patent Examiner, Art Unit 3635